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*Competing on Analytics:  
The Future of Newspapers*

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## About E.J. Barry

E.J. Barry is a marketing technology consulting firm specializing in the use of information, technology and best practices to improve business performance. We design data warehouse and business intelligence (BI) systems with advanced reporting, analytics, and CRM.

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## Competing on Analytics: *The Future of Newspapers*

*Virtually every U.S. newspaper understands the need to develop multiple audiences across a variety of print, online and direct marketing products. However, a relative handful has fully adopted the tools and techniques to build multiple audiences and sell the value of them to existing and prospective advertisers. Newspapers that work hard to reinvent themselves, equip themselves with the right data, technology and analytical tools, and improve their core business processes will survive, even thrive, in the years to come.*

**By Larry Sackett**

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U.S. newspaper publishers are leaving hundreds of millions of dollars in value on the table, not because they are lazy or incompetent, but because they haven't equipped themselves or their newspapers to compete in the 21<sup>st</sup> century.

Smarter and more scientific selling and management methods are being used widely and successfully in other industries. However, relatively few newspapers have adopted the best practices that result from the combined use of data, technology, and business intelligence. Nor have they fully exploited newspapers' incredible reach of multiple cross-platform audiences desired by existing and prospective advertisers. Newspapers that do will prosper in the coming years.

Predictive marketing, also known as data mining, is highly profitable in industries ranging from gambling (Harrah's), to financial services (Capital One and GE) to consumer packaged goods (P&G, Clorox) and online retailers (Amazon, Best Buy). But it's rarely practiced in newspapers – to the detriment of the industry.

Relatively few newspapers use predictive marketing techniques to target customer segments most likely to subscribe – and to stay loyal. Or to identify niche audiences that can be served by a portfolio of print, online and direct marketing products. Even fewer use predictive models to pinpoint potential churners so that the newspaper can do something about it before a subscriber actually quits. The cost of subscriber churn is enormous, soaking up the majority of acquisition budgets.

Editors often don't have access to the research that could help them cement relationships with readers and cut down on that churn. Much survey research is too general, and sample sizes too small, to provide any real understanding of reader requirements or why subscribers defect.

Finance departments don't have the tools to give managers the numbers they need – when they need them. Traditional reporting of income statements, balances, and cash flow is after the fact, too late to help managers make a difference in the *current* period.

Advertising departments watch advertiser dollars flow into other media, and don't have ready access to the information that could show potential advertisers the true value of reaching multiple newspaper audiences through a variety of print and online product.

## **Facing the Future – Successfully**

Competing in the years to come will require competing on analytics, using tools such as predictive marketing and database analysis. But that's only part of the story.

The most successful competitors today – the ones newspapers need to imitate – are reinventing themselves from the ground up, relentlessly improving core business and marketing processes.

Honeywell (AlliedSignal), for example, refined its internal processes to generate more than \$800 million in annual costs savings. And Harrah's, once a dowdy and down-trodden gaming company, retooled its marketing processes to focus on high-value customers. Since 2001, the company has doubled its revenues from \$3.3 billion to \$7.1 billion in 2005, a 21 percent compound annual growth rate. Microsoft and Apple constantly innovate, using disciplined new product development processes. Wal-Mart and Dell have set the standards for supply chain management processes.

What sets these companies apart is their ability to define and measure their core processes, from sales and marketing, to new product development, to operations, distribution and finance. They are using data warehouses, business intelligence, dashboards and key performance indicators (KPIs), and, yes, predictive marketing to wring all the value they can from how they conduct business.

They believe – and act on the belief – that if you can't measure it, you can't improve it, and if you can't describe it, you can't measure it. Their goal is sustainable, profitable growth. And they're achieving it.

There's no reason that newspapers can't adopt this approach, too, and the implications are huge.

## **The Opportunities Abound**

Across the spectrum of the newspaper's operations – from circulation district managers, to advertiser sales reps, to editors and Web site managers, to financial analysts – everyone can benefit from a broad-based effort to apply the best in business intelligence to the everyday work of creating and selling a great newspaper.

Financial managers can use predictive marketing to better forecast advertising, subscription, and single-copy sales.

Web site managers can analyze online behaviors to increase traffic, improve the user experience, and to more effectively target advertising.

In advertising, competing with analytics allows the newspaper to sell its true value to advertisers, and to manage sales forces for greater productivity.

Better management through analytics will let newspapers end truly wasteful processes – the expense of big returns from single-copy operations and the money drain of continually selling subscriptions to churners, many of whom never pay.

So how do you do it? Where and how do you apply the principles of competing through analytics? Let's take a look at the many opportunities that are out there.

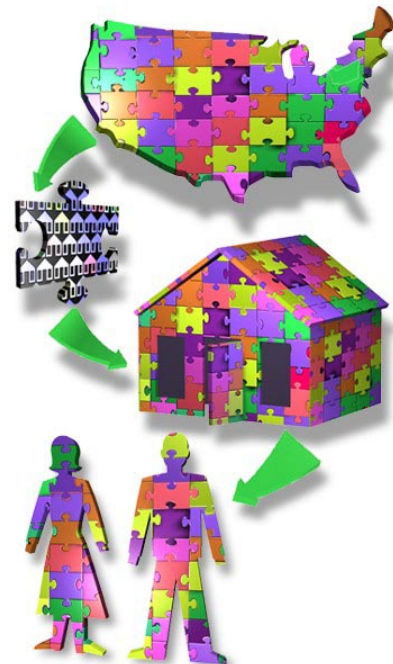
### **'Wow . . . we had no idea'**

With smarter and more scientific selling, the opportunities in advertising are truly eye-opening. The broad perception of newspapers among potential advertisers is only that circulation is in decline. But that view misses the much bigger picture that newspapers need to bring into focus: When newspaper subscriber databases are matched to advertiser customer databases, the results are often startling. Frequently we see the duplication, or "reach," at 50 percent or more.

No other local medium can come close to that kind of reach. If you add your online subscribers, the combined reach hits the stratosphere (See sidebar: **Print and Online Are Two Sides of the Same Coin.**)

We recently presented the results of a database analysis to a newspaper's biggest furniture advertiser. The facts were impressive: more than 50 percent overlap between the store's customers and the newspaper's subscribers. When we used a commercial segmentation system (Claritas' PRIZM) to define the store's best-customer segments (spending more than \$1,000 in the past 12 months), the newspaper's reach of these segments ranged from 60 percent to 70 percent. The store owner's surprised reaction: **"Wow! All we hear about is declining circulation. We had no idea so many of your subscribers are also our customers."** The payoff: The store committed to nearly doubling its newspaper advertising spending, including a big chunk of what had been budgeted for direct marketing.

**The message is clear: Use data and analytics, not net paid circulation, to sell the value of your print and online audiences.**



## Take Back Advertising Market Share

There's little question that advertising sales is often more art than science, relying on established relationships between veteran sales reps and key accounts. That's still very valuable. But as major retailers shift advertising dollars to online (or in the case of Federated, move local print dollars into national TV), more revenue must be generated locally from smaller and smaller accounts. And we know newspapers are not increasing sales staffs.

By wrapping science around the art of sales, sales force productivity can be raised dramatically, as much as 30 to 50 percent, as is seen in other industries. The only way to accomplish these kinds of increases is to revamp the sales process itself. This means making the following changes:

- **Improve the quality of sales leads** by finding non-advertising prospects that have similar characteristics to existing accounts, using Standard Industrial Classification (SIC or NAICS) codes, number of employees, annual sales revenue, and other business demographics. Metros with thousands of retail accounts can use regression techniques to identify the most salient characteristics of advertisers and high-opportunity prospects.

(Several years ago, when Larry was in charge of database marketing for Gannett, he and his colleagues created an advertiser/non-advertiser database at one of Gannett's newspapers. Using techniques similar to what we described above, the newspaper generated almost \$1 million in new business in less than three months. Total out-of-pocket cost for the project was less than \$50,000.)

- **Further penetrate advertising categories** by offering category-specific packages of print, online, and direct marketing. It's important to actively go out and meet with advertisers and prospects to learn their requirements. Ask them point-blank what it would take to get them to advertise more in your newspaper.
- **Better manage sales pipelines by tracking** the number of sales calls, new business presentations, active accounts, and forecasts. Each phase of the selling process should be well defined, with specific metrics for advancing to the next phase. SAP Americas, for example, manages its forecasts within two or three percent of actual sales.
- **Provide information to advertisers** that will make them more successful. A wide variety of tools can accomplish this, ranging from survey research (syndicated and proprietary), to geographic information systems (GIS), to database analysis. The predictive marketing techniques we mentioned earlier can also be applied to an advertiser's customer database. Newspapers can make a lot of money by helping advertisers better understand their own customers.
- **Balance sales territories** so that there are equal opportunities in each. Assign "hunters" to generate new business and "gatherers" to maintain existing accounts. Align sales incentive plans to both types of sales reps.

- **Streamline administrative processes** so that sales reps can spend more time in the field. Let sales clerks handle routine responsibilities. One additional sales call --every day, five days a week, 50 weeks a year, times the number of field sales reps -- adds up to a lot more revenue.
- **Provide timely information to managers and sales reps.** Each sales rep should know exactly where he or she stands every day against sales goals and prior-year performance. Sales reps should know which of their accounts are falling behind contract commitments, are showing declines, or have recently stopped advertising.

A few months ago we created an “at-risk” report for one of our clients that listed every account that had not advertised in the most recent four weeks, but had in the previous 21 weeks. The total amount of advertising represented by these lapsed accounts in the previous 21 weeks was more than \$1.3 million. The report, which automatically rolls forward every week, has become a key tool to reduce advertiser churn. It’s one of dozens of reports that are available on the newspaper’s Web dashboard.

## Reclaim Lost Readership and Circulation

While the costs of reader churn are high, the flip side is that the dollar value of customer loyalty is big. As little as a two percentage point increase in annual retention can yield more than \$250,000 a year in bottom-line cash flow for a 100,000-circulation newspaper.



Editors – with access to research that is wide and deep enough – can discern the unique interests and needs of different reader audiences. The research, combined with predictive marketing that highlights critical readership attributes, can cement the newspaper’s relationships with readers. This information can also be used to promote the value of newspaper reading.

Content is king. Editorial departments must gain deeper understanding of reader preferences so they can tailor content to meet the requirements of different audience segments – print and online. A statistical technique called “decision trees” can be used with survey research to segment readers based on each segment’s needs and demographic characteristics. Armed with this intelligence, editors can provide more relevant content, and develop new products to serve individual segments.

Instead of a “spray-and-pray” approach to subscriber acquisition, newspapers can systematically identify high-value customer segments, and then match them with the best offers and sales channels.

Managing circulation with analytics can have big financial paybacks. Retention and cash flow can be enhanced by targeting customer segments that are inherently loyal in the first place (again using predictive marketing). Customer contact strategies that incorporate e-mails for promoting upcoming content and single-click renewals are valuable tools to keep subscribers.

Costs for newsprint and distribution can be cut by optimizing grace periods. For example, a 45-day grace period might be whittled down to 30 days if a newspaper finds that the majority of subscribers who are going to pay do so within 30 days. Bad debt can be reduced with sales processes that favor recurring credit card payments and more timely collections calling.

Single-copy sales can be increased by zeroing in on outlets with the best growth potential, rigorously testing different displays, advertising, and promotions to see what works – and what doesn't. Expensive single-copy returns can be cut to as low as 15 percent daily and 12 percent Sunday (without increasing sellouts) by using wireless handhelds, statistical analysis and exceptions reporting to manage draws – outlet by outlet, day by day. One of our clients has sliced single-copy returns by nearly two percentage points in just the past eight months.

Circulation revenue can be raised by using pricing strategies that match rates to the needs of different consumer segments, eliminating discounts for segments where they do not lift acquisition and retention rates.

Performance of individual carrier routes, including starts, stops, complaints, and household penetration can be improved by tracking daily results and quickly responding to variances from established norms and goals. Performance dashboards with KPIs can alert district managers when there is trouble.

Editors and circulation executives can survey defectors to find out the root causes of subscriber churn – and then take the necessary steps to fix problems.

One of the best ways to maintain home delivery circulation is to budget weekly starts and permanent stops, and then track budgets against actual results. If you fall behind for new starts, or find a spike in permanent stops, you can take immediate steps to remedy the situation, *before* you fall so far behind that you can't catch up.

## **Move Finance Front and Center**

Finance departments in the 21<sup>st</sup> century need to be more proactive in helping newspapers achieve consistent, profitable growth.

At a minimum, finance should begin providing weekly revenue and expense data, with detail down to general ledger accounts and individual transactions. Revenues and expenses can be compared (daily in many cases) with monthly budgets so that circulation and advertising executives can react quickly to problems.

Finance can help develop key performance indicators (KPIs) for virtually every aspect of revenue generation. For example, if after the first week of a period, an advertising sales rep is at less than 50 percent of scheduled-to-run revenue compared to budget, a manager can help the sales rep take steps to increase sales before the end of the period. Or, if new subscription

starts are behind plan at mid-period, and unspent discount dollars are available, circulation can immediately launch a special promotion to generate more starts.

Finance can direct the development of zero-based advertising budgets, with monthly budgets for every advertising account and sales rep, with roll-ups to each ad category.

Revenue optimization is another opportunity for finance. Circulation can keep close tabs on the number and dollar amount of subscribers on discount rates. Advertising can track unearned discounts and unbilled services for each ad. Advertising can closely monitor ad adjustments and reduce the errors that cause the adjustments. Sales managers can also track contract fulfillment more closely, with early warnings if an account is falling behind.

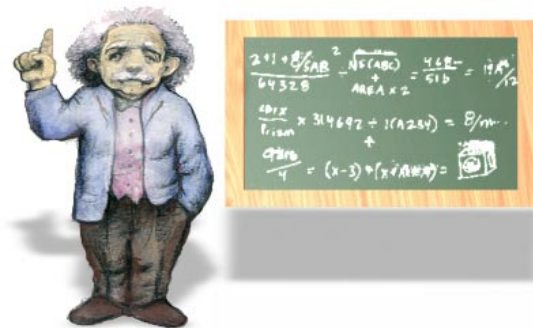
Traditional financial reporting can be greatly enhanced through the use of business intelligence (BI) tools that enable managers to view revenues and expenses from a wide variety of perspectives, with drill-down from summary level data to individual transactions. Reports and KPIs should be available on Web dashboards or via automated e-mail delivery.

## What It Takes to Connect the Dots

Newspapers make money by helping people make connections: advertisers to consumers, businesses to other businesses, and people to other people. Newspapers have always been effective at doing this in print. Now they can do this profitably in both print and online.

One of most powerful assets newspapers have to make connections is their consumer and business databases. Databases augmented with consumer and business demographics provide much of the fuel needed to compete on analytics. The consumer database should include both print and online subscribers. A comprehensive business database with every business in the market – broken out by advertisers and non-advertisers – is a must.

Reader research needs to be designed to work with statistical techniques for segmentation, targeting and positioning. Sample sizes have to be increased to provide statistical reliability across multiple reader segments. Instead of viewing research as an expense, newspaper publishers should recognize that it's an investment with incredibly high ROI.



Newspaper circulation and advertising systems are good for managing the day-to-day business, but too much of the reporting is after the fact. Often financial results aren't available until a week or two after the end of the month. You can't take much action on information that old. Reporting from these systems is clunky at best. Managers work around these limitations by re-keying data from production reports into Access databases or Excel spreadsheets – inevitably introducing errors in the process. These approaches just don't work if you're competing on analytics.

Data warehouses extract raw data from transaction systems, usually daily, and load it into a multidimensional database format that is designed for better access to information. Business intelligence (BI) applications increase the power of the information by letting users do sophisticated analysis and reporting, even if those users have no programming skills. “Multidimensional” means that you can look at the facts of your business – starts, retention, single-copy sales, ad adjustments, advertising revenue – from a variety of perspectives, such as customers, sales reps, products, geography, and time.

BI systems also provide managers with instant access to information about leading indicators, such as daily starts and stops, and month-to-date advertising revenue. No re-keying of data means no arguments about the integrity of the numbers. Key performance indicators can be displayed in Web dashboards, giving managers greater visibility into virtually every aspect of operations, marketing and finance.

Well-designed data warehouse and BI systems are built around core business processes, so that you can gauge how well they are working. Performance metrics for each business process, such as customer acquisition, single-copy draw management, pricing, advertising budgeting and forecasting, are readily available. Finance can accurately calculate the net revenue per subscriber, a metric that has eluded newspapers for years.

## **Choosing to Thrive**

Improving core internal business and marketing processes is hard work, but it’s really the only path to sustainable, profitable growth. Without revamping these processes, newspapers will remain trapped in systems, policies, and procedures that just don’t work anymore. A publisher’s mandate must be to re-examine every core editorial, circulation and advertising process to see how it can be improved. Above all, it’s critical that you have accurate and timely metrics that tell you how well core processes are performing.

It takes highly skilled people to design and execute effective performance-improvement strategies. Newspaper staffers need to be trained in analytics and process redesign. Smarter sales and marketing require access to better data, technology and analytical tools. Editors must take a more scientific approach to meeting reader requirements.

The choice is stark. Newspapers that work hard to reinvent themselves, equip themselves with the right data, technology and analytical tools, and improve their core business processes will survive, even thrive, in the years to come.

Newspapers that maintain the status quo will continue their slow downward spiral in circulation, advertising sales and financial results. They will continue to cut costs beyond the bone and, in so doing, damage their businesses irreparably. Wall Street will not reward them, however many employees they terminate. We’ve seen too much of this in recent history.

The time to change is now.

## Print and Online Are Two Sides of the Same Coin (sidebar)

In my opinion, one of the biggest mistakes newspapers have made is to provide content online without requiring registration. Purists may argue that all editorial content should be free to anonymous Website visitors, but the economic reality is that it's a lose-lose proposition.

Because of declining advertising sales, newspapers are laying off editorial staffers just when they are needed most to add value to Web and print content. Less compelling content ultimately means fewer Website visitors, let alone print subscribers. Newspapers will never be able to make up the losses in print advertising as advertising shifts to the Web – if current practices don't change. Everybody loses, including the anonymous Website visitor.



The big payoff in newspaper advertising will be to aggregate both print and online subscribers. Let's go back to the furniture store example in the main article. Instead of a reach of only 50 percent of print subscribers, the combination of print and online might take that reach figure to 70 or 80 percent. Nobody can compete with those numbers. Equipped with this information, a newspaper can tailor advertising programs to the unique requirements of its advertisers.

I don't disagree with offering some content for free, but the quid pro quo with the Website visitor has to be an exchange of information – free content in return for valid registration data including name, address, phone number, and e-mail address. The only way to maximize online advertising revenue is to be able to sell the value of online audiences – and you need good demographic data to do that. (Accurate address information is required to append demographic and lifestyle data to households.)

Newspaper print subscribers can have access to expanded editorial content (way beyond what's offered in print) as can online-only subscribers (whether free or paid).

Registration data should be fed back into the newspaper's data warehouse and integrated with print subscriber information. This information can then be used to sell integrated programs of print, online, and direct marketing.

Print and online advertising sales departments should be combined, each side teaching tricks of the trade to the other. Advertisers benefit, print and online customers benefit, and newspapers make a lot more money.

-- Larry Sackett

## **About E.J. Barry**

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Larry Sackett, president and CEO, has more than 30 years of experience in media, marketing, and technology. He was one of the original founders of USA TODAY and designed the newspaper's satellite/facsimile printing and distribution network. Before starting E.J. Barry, Larry was president of Claritas's Media and Communications Group. He began his career as a newspaper reporter.

Carla Hendricks, vice president/marketing, was a news editor for the Paris-based International Herald Tribune and later an assistant editor at The Washington Post. She writes frequently on subjects related to sales, marketing and technology. She is a landscape designer in her spare time.

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